



PATENT
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Triebes, et al.)	Examiner:	Catherine Simone
)		
Appl. No:	10/036,743)	Art Unit/T.C:	1772
)		
Filed:	December 21, 2001)	Deposit Acct. No:	04-1403
)		
Title:	Elastomeric Articles Having Improved Chemical Resistance)	Conf. No:	3702
)		
)	Customer ID No:	22827

Mailstop Appeal Brief - Patents
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Post Office Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL

Honorable Commissioner:

Appellants submit the following brief on appeal in accordance with 37 C.F.R. § 41.37:

1. REAL PARTY IN INTEREST

The real party in interest in this matter is the assignee of record, Kimberly-Clark Worldwide, Inc.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to the Appellants or the Appellants' legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. STATUS OF CLAIMS

Claims 54-63 and 65-70 are currently pending in this application, including independent claims 54 and 67. All the claims are attached hereto as Exhibit A

In the Final Office Action of August 23, 2006, all of the pending claims were finally rejected under 35 U.S.C. §103(a).

4. STATUS OF AMENDMENTS

To the Appellants' knowledge, all amendments have been entered into the record.

5. SUMMARY OF CLAIMED SUBJECT MATTER

In general, the present application is directed to, in one embodiment, an elastomeric article that includes a chemical protection layer that will not substantially dissolve when contacted with certain chemicals or solvents, such as bone cement. The chemical protection layer contains at least one crosslinked, modified silicone elastomer. Pg. 4, lines 13-16. In one particular embodiment, the substrate body contains at least one elastomeric block copolymer. Pg. 5, lines 18-19. For example, some examples of suitable elastomeric block copolymers include S-EB-S (styrene-ethylene-butylene-styrene) block copolymers, S-I-S (styrene-isoprene-styrene) block copolymers, S-B-S (styrene-butadiene-styrene) block copolymers, S-I (styrene-isoprene) block copolymers, and S-B (styrene-butadiene) block copolymers. Pg. 5, lines 8-12.

Regardless of the particular material used to form the substrate body 24, the glove 20 also includes a chemical protection layer 36 that covers the outer surface of the substrate body 24 during use. Figs. 1-2 and pg. 7 line 30 – pg. 8, line 2. The

chemical protection layer 36 contains a modified silicone elastomer that is crosslinked to impart chemical resistance to the glove 20. Pg. 8, lines 6-8.

Independent claim 54, for instance, is directed to an elastomeric glove that comprises a substrate body, a chemical protection layer that overlies an outside surface of the substrate body, a donning layer that overlies an inside surface of the substrate body, and an optional outer layer that overlies the chemical protection layer. See, e.g., Pg. 1, lines 22-26 and Pg. 2, lines 13-17. The substrate body includes a layer made of at least one elastomeric block copolymer, such as a styrene-ethylene-butylene-styrene (S-EB-S) triblock copolymer. See, e.g., Pg. 1, line 27 - Pg. 2, line 2. The chemical protection layer is formed from a polymeric material that consists essentially of at least one crosslinked, modified silicone elastomer that imparts relative chemical resistance to the elastomeric article. See, e.g., Pg. 1, lines 26-27; Pg. 8, lines 8-24; and Example at Pgs. 18-20. The chemical protection layer faces an external, environment-exposed surface of the elastomeric glove and the coating faces an internal, body-contacting surface of the elastomeric glove. Figs. 1-2.

Independent claim 67, for example, is directed to an elastomeric glove that comprises a substrate body, a chemical protection layer, a donning layer, and, optionally, an outer layer overlying the chemical protection layer. See, e.g., Pg. 1, lines 22-26 and Pg. 2, lines 13-17. The substrate body is shaped to the contours of a hand and includes a layer made of at least one elastomeric block copolymer selected from the group consisting of styrene-ethylene-butylene-styrene block copolymers, styrene-isoprene-styrene block copolymers, styrene-butadiene-styrene block copolymers, styrene-isoprene block copolymers, styrene-butadiene block copolymers, and

combinations thereof. See, e.g., Pg. 1, line 27 – Pg. 2, line 2. The substrate body has an inside surface and an outside surface. The chemical protection layer covers the outside surface of the substrate body, and is formed from a polymeric material that consists essentially of at least one crosslinked, modified silicone elastomer selected from the group consisting of phenyl-modified silicones, vinyl-modified silicones, methyl-modified silicones, fluoro-modified silicones, alkyl-modified silicones, alkoxy-modified silicones, alkylamino-modified silicones, and combinations thereof. See, e.g., Pg. 8, Line 8 – Pg. 9, line 3, and Example at Pgs. 18-20. The crosslinked modified silicone elastomer imparts relative chemical resistance to the glove. The chemical protection layer has a thickness of from about 0.01 millimeters to about 0.20 millimeters. The donning layer overlies the inside surface of said substrate body. See Figs. 1-2 and Pg. 2, lines 7-11. The optional outer layer, when present, overlies the chemical protection layer. The chemical protection layer faces an external, environment-exposed surface of the elastomeric glove and the donning layer faces an internal, body-contacting surface of the elastomeric glove. See, e.g., Figs. 1-2.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

In the Final Office Action, independent claims 54 and 67 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,792,531 to Littleton, et al. in view of U.S. Patent No. 4,302,852 to Joung.

7. ARGUMENT

Appellants respectfully submit that the presently pending claims are patentable over the cited references.

Littleton, et al. is directed to elastomeric, powder-free articles having improved donning characteristics. More particularly, Littleton, et al. describes an elastomeric article, such as a glove, that may include a substrate body made of a mid block saturated styrene block copolymer (such as an S-EB-S block copolymer). The elastomeric articles of Littleton, et al. further include a donning layer overlying at least one side of the substrate body, wherein the donning layer comprises a chlorinated mid block unsaturated block copolymer (such as a chlorinated styrene diene block copolymer). As correctly noted in the Office Action, Littleton, et al. fails to teach various aspects of independent claims 54 and 67. More specifically, the Examiner concedes that Littleton, et al. fails to teach the claimed chemical protection layer.

Nevertheless, Littleton, et al. was combined with Joung in an attempt to render obvious independent claims 54 and 67. Appellants respectfully submit, however, that no motivation or suggestion exists to modify the glove of Littleton, et al. as attempted by the Office Action. Essentially, the Office Action attempts to combine the glove of Littleton, et al. with Joung's slip resistant outer surface in rejecting independent claims 54 and 67.

As explained by the Federal Circuit, obviousness may only be established by modifying the teachings of the prior art to produce the claimed invention if there is some teaching, suggestion, or motivation to do so found either in the reference itself or in the knowledge generally available to one of ordinary skill in the art. See e.g., *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

Accordingly, even if all elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to modify the teachings of the references to arrive at the claimed invention. See e.g., *In re Regel*, 188 U.S.P.Q. 132 (C.C.P.A. 1975). Where no reasonable intrinsic or extrinsic justification exists for the proposed modification, a case of *prima facie* obviousness will not have been established.

As discussed above, Littleton, et al. is directed to an elastic glove made from substrate body made of a mid block saturated styrene block copolymer (such as an S-EB-S block copolymer), which is hypoallergenic. Col. 2, lines 3 and 14-18. Littleton, et al. discloses that this type of synthetic glove provides advantages over natural latex gloves. As such, Littleton, et al. is directed to a substitute for natural latex gloves because of the drawbacks and disadvantages of natural latex gloves. For example, according to Littleton, et al., natural latex is susceptible to environmental damage. Col. 1, lines 10-12. Also, some persons are allergic to natural latex. Col. 1, line 10. The use of natural latex can result in pinholes formed in the resulting articles, due to the impurities found in natural latex. Col. 1, lines 20-23.

Nowhere does Littleton, et al. mention or even suggest that a layer can overly the outside surface of the substrate body. As such, Littleton, et al. does not provide any motivation or suggestion to add any layer overlying the outside surface of the substrate body. In fact, Littleton, et al. discloses that the use of their synthetic elastomers (i.e., S-EB-S block copolymers) provides resistance to environmental degradation. See, col. 2, line 3 and lines 37-40. Thus, one of ordinary skill in the art would not recognize any

need for a chemical protection layer overlying said outside surface of said substrate body, such as required by independent claims 54 and 67.

On the other hand, the entire premise of Joung revolves around its elastomeric support glove being made from an "allergenic" material (specifically, natural rubber latex). Joung is directed to a glove that may include (1) an allergenic elastomeric support glove (made of natural rubber latex), (2) a barrier glove of a nonallergenic elastomer (such as a room-temperature vulcanizing (RTV) silicone elastomer) bonded to the inner surface of the support glove, and (3) a slip resistant glove of an elastomer (such as an RTV silicone elastomer combined with a very light lubricating powder) bonded to the external surface of the glove. A significant part of what Joung considers to be its "invention" is bonding a barrier glove containing a nonallergenic elastomer to the inner surface of the allergenic support glove to render the entire glove "hypoallergenic."

In view of Littleton, et al.'s teachings, one of ordinary skill in the art would not be motivated to modify the hypoallergenic substrate body made of a mid block saturated styrene block copolymer (such as S-EB-S) of Littleton, et al. with any teaching of Joung, which is directed to a allergenic elastomeric support glove (i.e., natural latex). Thus, one of ordinary skill in the art would not be motivated to modify the hypoallergenic substrate body made of a mid block saturated styrene block copolymer (such as S-EB-S) of Littleton, et al. with the outer RTV silicone layer of Joung.

Instead, it appears that the only rationale is based on the notion that it would have been "obvious to try" such an outer slip resistant glove on the hypoallergenic substrate of Littleton, et al., which is improper under 35 U.S.C. § 103(a). No teaching or

suggestion exists in either reference that an outer RTV silicone layer of Joung could be used with an hypoallergenic substrate. In fact, Joung only discloses that their outer RTV silicone layer can be used with their allergenic substrate (natural rubber). Accordingly, Appellants respectfully submit that independent claims 54 and 67 patentably define over Littleton, et al. and Joung, as no motivation or suggestion would have existed for one of ordinary skill in the art to combine these references as proposed by the Office Action.

Appellants emphasize that the teachings of the references must be viewed in their entirety, i.e., as a whole, to sustain a *prima facie* case of obviousness under 35 U.S.C. §103(a). Further, the appropriate test under 35 U.S.C. §103(a) is not whether the differences between the prior art and the claims are obvious, but instead whether the claimed invention as a whole would have been obvious. That is, the differences between a particular claim and the cited references cannot be viewed in a vacuum. In this case, Appellants respectfully submit that, when properly viewed as a whole, there is simply no motivation to combine the references in the manner suggested in an attempt to render obvious the present claims.

In any event, neither of the cited references recognizes the advantages of the elastomeric gloves of independent claims 54 and 67. According to the present application, the chemical protection layer will not substantially dissolve when contacted with certain chemicals or solvents, such as bone cement. Paragraph 16.

Appl. No. 10/036,743
Brief on Appeal
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Respectfully requested,

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8. CLAIMS APPENDIX:

54. An elastomeric glove that comprises:

 a substrate body shaped to the contours of a hand, said substrate body including a layer made of at least one elastomeric block copolymer, said substrate body having an inside surface and an outside surface;

 a chemical protection layer overlying said outside surface of said substrate body, said chemical protection layer being formed from a polymeric material that consists essentially of at least one crosslinked, modified silicone elastomer, said crosslinked modified silicone elastomer imparting relative chemical resistance to the glove;

 a donning layer overlying the inside surface of said substrate body; and

 an optional outer layer overlying said chemical protection layer;

 wherein the chemical protection layer faces an external, environment-exposed surface of the elastomeric glove and the donning layer faces an internal, body-contacting surface of the elastomeric glove.

55. The elastomeric glove of claim 54, wherein said modified silicone elastomer is selected from the group consisting of phenyl-modified silicones, vinyl-modified silicones, methyl-modified silicones, fluoro-modified silicones, alkyl-modified silicones, alkoxy-modified silicones, alkylamino-modified silicones, and combinations thereof.

56. The elastomeric glove of claim 54, wherein said modified silicone elastomer is selected from the group consisting of phenyl-modified silicones, vinyl-modified silicones, methyl-modified silicones, and fluoro-modified silicones.

57. The elastomeric glove of claim 54, wherein said modified silicone elastomer contains a diphenyl-modified dimethylsilicone.

58. The elastomeric glove of claim 54, wherein said chemical protection layer has a thickness of from about 0.01 millimeters to about 0.30 millimeters.

59. The elastomeric glove of claim 54, wherein said chemical protection layer has a thickness of from about 0.01 millimeters to about 0.20 millimeters.

60. The elastomeric glove of claim 54, wherein said chemical protection layer defines the external, environment-exposed surface of the elastomeric glove.

61. The elastomeric glove of claim 54, wherein said outer layer defines the external, environment-exposed surface of the elastomeric glove.

62. The elastomeric glove of claim 54, wherein the elastomeric block copolymer of the substrate body is selected from the group consisting of styrene-ethylene-butylene-styrene block copolymers, styrene-isoprene-styrene block copolymers, styrene-butadiene-styrene block copolymers, styrene-isoprene block copolymers, styrene-butadiene block copolymers, and combinations thereof.

63. The elastomeric glove of claim 54, wherein the elastomeric block copolymer is a styrene-ethylene-butylene-styrene triblock copolymer.

65. The elastomeric glove of claim 54, wherein said donning layer contains syndiotactic 1,2 polybutadiene.

66. The elastomeric glove of claim 54, further comprising a lubricant layer overlying an inside surface of said donning layer.

67. An elastomeric glove that comprises:
a substrate body shaped to the contours of a hand, said substrate body including a layer made of at least one elastomeric block copolymer selected from the group consisting of styrene-ethylene-butylene-styrene block copolymers, styrene-isoprene-

styrene block copolymers, styrene-butadiene-styrene block copolymers, styrene-isoprene block copolymers, styrene-butadiene block copolymers, and combinations thereof, said substrate body having an inside surface and an outside surface;

a chemical protection layer covering said outside surface of said substrate body, said chemical protection layer being formed from a polymeric material that consists essentially of at least one crosslinked, modified silicone elastomer selected from the group consisting of phenyl-modified silicones, vinyl-modified silicones, methyl-modified silicones, fluoro-modified silicones, alkyl-modified silicones, alkoxy-modified silicones, alkylamino-modified silicones, and combinations thereof, said crosslinked modified silicone elastomer imparting relative chemical resistance to the glove, wherein said chemical protection layer has a thickness of from about 0.01 millimeters to about 0.20 millimeters;

a donning layer overlying the inside surface of said substrate body; and

an optional outer layer overlying said chemical protection layer;

wherein the chemical protection layer faces an external, environment-exposed surface of the elastomeric glove and the donning layer faces an internal, body-contacting surface of the elastomeric glove.

68. The elastomeric glove of claim 67, wherein said modified silicone elastomer is selected from the group consisting of phenyl-modified silicones, vinyl-modified silicones, methyl-modified silicones, and fluoro-modified silicones.

69. The elastomeric glove of claim 67, wherein said modified silicone elastomer contains a diphenyl-modified dimethylsilicone.

70. The elastomeric glove of claim 67, wherein the elastomeric block copolymer is a styrene-ethylene-butylene-styrene triblock copolymer.

9. EVIDENCE APPENDIX

None

10. RELATED PROCEEDINGS APPENDIX

None